-continued

Leu Glu Thr Asp Val Cys Thr
255

<210> SEQ ID NO 14
<211> LENGTH: 9
<212> TYPE: PRT
<213> ORGANISM: Plasmodium vivax
<220> FEATURE:

<400> SEQUENCE: 14

Ala Asn Gly Ala Gly Asp Gln Pro Gly
1 5

What is claimed is:

1. An isolated and purified nucleic acid molecule encoding a *P. vivax* circumsporozoite (CS) hybrid (PvCS-hybrid) protein comprising the N-terminal region of CS protein, the C-terminal region of CS protein, one or more of Type I repeats selected from the group consisting of SEQ ID. NO: 3, 4, 5, 6, 7, 8 and 9, one or more of Type II repeats selected from the group consisting of SEQ ID NO:10 and 14, and a 12 amino acid insert set forth as SEQ ID. NO:11 occurring after Type I repeats in *P. vivax* CS VK210.

2. The isolated nucleic acid molecule of claim **1**, wherein said nucleic acid molecule is SEQ ID NO: 12.

3. A recombinant vector comprising the nucleic acid molecule of claim **1**.

4. The vector of claim **3** wherein said vector is AKI-ePVCS1-2.

5. An isolated A host cell transformed with the vector according to claim **3**.

6. The host cell of claim **5** wherein said host cell is prokaryotic.

7. The host cell of claim **5** wherein said host cell is eukaryotic.

8. A method for isolating and purifying PvCS-hybrid protein comprising:

growing a host cell containing a recombinant vector expressing PvCS-hybrid protein according to claim **5** in a suitable culture medium,

causing expression of said vector under suitable conditions for production of PvCS-hybrid protein, and

lysing said host cells and recovering said PvCS-hybrid protein.

9. The method of claim **8** further comprising removal of *E. coli* proteins.

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